



Application No. 10/717,597
Docket No. 031896-012000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
Natalie C. TWINE et al) Examiner Not yet assigned
Serial No. 10/717,597) Group Art Unit: Not yet assigned
Filed: November 21, 2003)
For: METHODS FOR DIAGNOSING RCC)
AND OTHER SOLID TUMORS)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

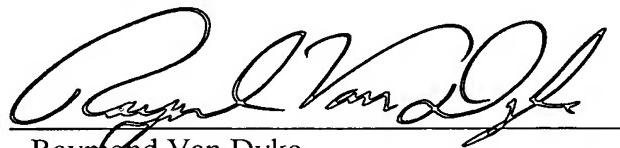
In accordance with the duty of disclosure as set forth in 37 C.F.R. §1.56, Applicants hereby submit the following information in conformance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

The documents are being submitted within three (3) months of the filing of this application or entry into the national stage of this application, or before the first Office Action on the merits, whichever is later, therefore no fee or certification is required under 37 C.F.R. § 1.97(b).

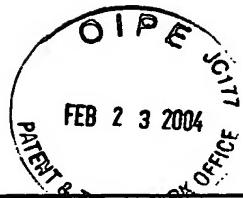
It is requested that the accompanying PTO-1449 be considered and made of record in the above-identified application. To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

The Commissioner is hereby authorized to charge any fees connected with this filing which may be required now, or credit any overpayment to Deposit Account No. 19-2380. (031896-012000)

Respectfully submitted,

By: 
Raymond Van Dyke
Registration No. 34,746

NIXON PEABODY LLP
Suite 900
401 9th Street, N.W.
Washington, DC 20004-2128



80

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

 Substitute for form 1449A/PTO		<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	10/717,597
		Filing Date	November 21, 2003
		First Named Inventor	TWINE et al
		Art Unit	Not yet assigned
		Examiner Name	Not yet assigned
Sheet	1	of	7
		Attorney Docket Number	031896-01200

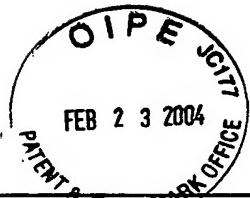
U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



FEB 23 2004

FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



Substitute for form 149B/PTO				<i>Complete if Known</i>	
				Application Number	10/717,597
				Filing Date	November 21, 2003
				First Named Inventor	TWINE et al
				Group Art Unit	Not yet assigned
				Examiner Name	Not yet assigned
Sheet	3	of	7	Attorney Docket Number	031896012000

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	✓	ALTSCHUL ET AL.; " GAPPED BLAST AND PSI-BLAST: A NEW GENERATION OF PROTEIN DATABASE SEARCH PROGRAMS ", NUCLEIC ACIDS RESEARCH, 1997, PP. 3389-3402, VOL. 25, NO. 17, OXFORD UNIVERSITY PRESS			
	✓	BERGER P. ET AL.; " LOSS OF PHOSPHATASE ACTIVITY IN MYOTUBULARIN-RELATED PROTEIN 2 IS ASSOCIATED WITH CHARCOT-MARIE TOOTH DISEASE TYPE 4B1 ", HUMAN MOLECULAR GENETICS, 2002, PP. 1569-1579, VOL. 11, NO. 13, OXFORD UNIVERSITY PRESS			
	✓	BOE R. ET AL.; " THE PROTEIN PHOSPHATASE INHIBITOR OKADAIC ACID INDUCES MORPHOLOGICAL CHANGES TYPICAL OF APOPTOSIS IN MAMMALIAN CELLS ", EXPERIMENTAL CELL RESEARCH 195, 1991, PP. 237-246, ACADEMIC PRESS, INC.			
	✓	BOTTINI N. ET AL.; " LOW-MOLECULAR-WEIGHT PROTEIN TYROSINE PHOSPHATASE AND HUMAN DISEASE: IN SEARCH OF BIOCHEMICAL MECHANISMS ", ARCHIVUM IMMUNOLOGIAE ET THERAPIAE EXPERIMENTALIS, 2002 pp. 95-104, vol. 50,			
	✓	BROWN-SHIMER, ET AL.; " EFFECT OF PROTEIN TYROSINE PHOSPHATASE 1b EXPRESSION ON TRANSFORMATION BY THE HUMAN neu ONCOGENE ", CANCER RESEARCH, 52, 1992, PP. 478-48			
	✓	CHEN ET AL.; " THE MYOTONIC DYSTROPHY KINASE-RELATED Cdc42-BINDING KINASE IS INVOLVED IN THE REGULATION OF NEURITE OUTGROWTH IN PC12 CELLS ", THE JOURNAL OF BIOLOGICAL CHEMISTRY 1999, PP. 19901-19905, VOL. 274, NO. 28, THE AMERICAN SOCIETY FOR BIOCHEMISTRY AND MOLECULAR BIOLOGY, INC.			
	✓	DELAGRAVE ET AL.; " RECURSIVE ENSEMBLE MUTAGENESIS ", PROTEIN ENGINEERING, 1993, PP. 327-331, VOL. 6 NO. 3, OXFORD UNIVERSITY PRESS			
	✓	DONG ET AL.; " Cdc42 ANTAGONIZES INDUCTIVE ACTION OF cAMP ON CELL SHAPE, VIA EFFECTS OF THE MYOTONIC DYSTROPHIC KINASE-RELATED Cdc42-BINDING KINASE (MRCK) ON MYOSIN LIGHT CHAIN PHOSPHORYLATION ", EUROPEAN JOURNAL OF CELL BIOLOGY APRIL 2002, PP. 231-242, VOL. 81			

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1



Substitute for FORM PTO-146A (01-09-97)				<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/717,597
Sheet	4	of	7	Filing Date	November 21, 2003
				First Named Inventor	TWINE et al.
				Group Art Unit	Not yet assigned
				Examiner Name	Not yet assigned
				Attorney Docket Number	031896-012000

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. [†]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	✓	ENGELMAN ET AL.; "IDENTIFYING NONPOLAR TRANSBILAYER HELICES IN AMINO ACID SEQUENCES OF MEMBRANE PROTEINS", ANN. REV. BIOPHYS. CHEM. 1986, PP. 321-353, VOL. 15, ANNUAL REVIEWS INC.			
	✓	FLOREA ET AL.; "A COMPUTER PROGRAM FOR ALIGNING A cDNA SEQUENCE WITH A GENOMIC DNA SEQUENCE", GENOME RESEARCH 1998, PP. 967-974, VOL. 8, COLD SPRING HARBOR LABORATORY PRESS			
	✓	GOSSEN ET AL.; "TRANSCRIPTIONAL ACTIVATION BY TETRACYCLINES IN MAMMALIAN CELLS", SCIENCE JUNE 23, 1995, PP. 1766-1769, VOL. 268			
	✓	GUATELLI ET AL.; "ISOTHERMAL, IN VITRO AMPLIFICATION OF NUCLEIC ACIDS BY A MULTIZYME REACTION MODELED AFTER RETROVIRAL REPLICATION", PROC. NATL. ACAD. SCI. USA, MARCH 1990, PP.1874-1878, VOL. 87			
	✓	HASELOFF ET AL.; "SIMPLE RNA ENZYMES WITH NEW AND HIGHLY SPECIFIC ENDORIBONUCLEASE ACTIVITIES", NATURE, AUGUST 18, 1988, PP. 585-591, VOL. 334			
	✓	HYRUP ET AL.; "PEPTIDE NUCLEIC ACIDS (PNA): SYNTHESIS, PROPERTIES AND POTENTIAL APPLICATIONS", BIOORGANIC & MEDICINAL CHEMISTRY, 1996, PP. 5-23, VOL. 4, NO. 1, ELSEVIER SCIENCE LTD., GREAT BRITAIN			
	✓	ISHIDA ET AL.; "TREATMENT OF MYELOID LEUKEMIC CELLS WITH THE PHOSPHATASE INHIBITOR OKADAIC ACID INDUCES CELL CYCLE ARREST AT EITHER G1/S OR G2/M DEPENDING ON DOSE", JOURNAL OF CELLULAR PHYSIOLOGY, 1992, PP. 484-492			
	✓	JANSSENS ET AL.; "PROTEIN PHOSPHATASE 2A: A HIGHLY REGULATED FAMILY OF SERINE/THREONINE PHOSPHATASES IMPLICATED IN CELL GROWTH AND SIGNALING," BIOCHEM. J., 353, 2001, PP 417-43			
	✓	KEDRA ET AL.; "THE GERMINAL CENTER KINASE GENE AND A NOVEL CDC25-LIKE GENE ARE LOCATED IN THE VICINITY OF THE PYGM GENE ON 11q13", HUM. GENET., 1997, PP. 611-619, VOL. 100			

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute for FORM 1470 INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				<i>Complete if Known</i>	
Sheet	5	of	7	Application Number	10/717,597
				Filing Date	November 21, 2003
				First Named Inventor	TWINE et al.
				Group Art Unit	Not yet assigned
				Examiner Name	Not yet assigned
				Attorney Docket Number	031896-012000

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	✓	KEEN ET AL.; <i>RAPID DETECTION OF SINGLE BASE MISMATCHES AS HETERODUPLEXES ON HYDROLINK GELS</i> , TRENDS IN GENETICS, 1997, P. 5, VOL. 7	
	✓	KWOH ET AL.; <i>TRANSCRIPTION-BASED AMPLIFICATION SYSTEM AND DETECTION OF AMPLIFIED HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 WITH A BEAD-BASED SANDWICH HYBRIDIZATION FORMAT</i> , PROC. NATL. ACAD. SCI. USA, FEBRUARY 1989, PP. 1173-1177, VOI.. 86	
	✓	LAM ET AL.; <i>CHARACTERIZATION OF A MONOClonAL ANTIBODY PANEL SHOWS THAT THE MYOTONIC DYSTROPHY PROTEIN KINASE, DMPK, IS EXPRESSED ALMOST EXCLUSIVELY IN MUSCLE AND HEART</i> , HUMAN MOLECULAR GENETICS, 2000, PP. 2167-2173, VOL. 9, NO. 4, OXFORD UNIVERSITY PRESS	
	✓	LEE ET AL.; <i>EXPRESSION OF SMALL INTERFERING RNAs TARGETED AGAINST HIV-1 rev TRANSCRIPTS IN HUMAN CELLS</i> , NATURE BIOTECHNOLOGY, MAY 2002, PP. 500505, VOL. 19	
	✓	LEUNG ET AL.; <i>MYOTONIC DYSTROPHY KINASE-RELATED Cdc42-BINDING KINASE ACTS AS A Cdc42 EFFECTOR IN PROMOTING CYTOSKELETAL REORGANIZATION</i> , MOLECULAR AND CELLULAR BIOLOGY, JANUARY 1998, PP. 130-140, VOL. 18, NO. 1, AMERICAN SOCIETY FOR MICROBIOLOGY	
	✓	LIZARDI ET AL.; <i>EXPONENTIAL AMPLIFICATION OF RECOMBINANT-RNA HYBRIDIZATION PROBES</i> , BIOTECHNOLOGY, OCTOBER 1988, PP. 1197-1202, VOL. 6	
	✓	MARATEA ET AL.; <i>DELETION AND FUSION ANALYSIS OF THE PHAGE Øx174 LYSIS GENE E</i> , GENE, 1985, PP. 39-46, VOL. 40, ELSEVIER SCIENCE PUBLISHERS	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute for form 1449B/PTO				<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/717,597
				Filing Date	November 21, 2003
				First Named Inventor	TWINE et al.
				Group Art Unit	Not yet assigned
				Examiner Name	Not yet assigned
Sheet	6	of	7	Attorney Docket Number	031896-012000

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	✓	MEYERS ET AL.; "OPTIMAL ALIGNMENTS IN LINEAR SPACE", CABIOS, 1988, PP. 11-17, VOL. 4, NO. 1, PRESS LIMITED, OXFORD ENGLAND		
	✓	MURPHY ET AL.; "GENETIC CONSTRUCTION, EXPRESSION, AND MELANOMA-SELECTIVE CYTOTOXICITY OF A Diphtheria Toxin-RELATED α -MELANOMA-STIMULATING HORMONE FUSION PROTEIN", PROC. NATL. ACA. SCI. USA, NOVEMBER 1986, PP. 8258-8262, VO. 83		
	J	NEEDLEMAN ET AL.; "A GENERAL METHOD APPLICABLE TO THE SEARCH FOR SIMILARITIES IN THE AMINO ACID SEQUENCE OF TWO PROTEINS", J. MOL. BIO., 1970, PP. 443-453, VOL. 48		
	✓	NO ET AL.; "ECDYSONE-INDUCIBLE GENE EXPRESSION IN MAMMALIAN CELLS AND TRANSGENIC MICE", PROC. NATL. ACADEMY SCI. USA, APRIL 1996, PP. 3346-3351, VOL. 93		
	J	NOMURA ET AL.; "ENHANCEMENT BY CYCLOSPORIN A OF TAXOL-INDUCED APOPTOSIS OF HUMAN URINARY BLADDER CANCER CELLS", UROL RES, 2002, PP. 102-111, VOL. 30		
	J	O'GORMAN ET AL.; "RECOMBINASE-MEDIATED GENE ACTIVATION AND SITE-SPECIFIC INTEGRATION IN MAMMALIAN CELLS", SCIENCE, MARCH 1991, PP. 1351-1355		
	J	ROSENBAUM ET AL.; "TEMPERATURE-GRADIENT GEL ELECTROPHORESIS", BIOPHYSICAL CHEMISTRY, 1987, PP. 235-246, VOL. 26		
	J	SAIKI ET AL.; "GENETIC ANALYSIS OF AMPLIFIED DNA WITH IMMOBILIZED SEQUENCE-SPECIFIC OLIGONUCLEOTIDE PROBES", PROC. NATL. ACADEMY SCI. USA, AUGUST 1989, PP. 6230-6234, VOL. 86		

Examiner Signature	Date Considered	
--------------------	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute for form 1449B/PTO				<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	10/717,597
Sheet	7	of	7	Filing Date	November 21, 2003
				First Named Inventor	TWINE et al
				Group Art Unit	Not yet assigned
				Examiner Name	Not yet assigned
				Attorney Docket Number	031896-012000

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	✓	STRAUB ET AL.; "GENOME-WIDE SCANS OF THREE INDEPENDENT SETS OF 90 IRISH MULTIPLEX SCHIZOPHRENIA FAMILIES AND FOLLOW-UP OF SELECTED REGIONS IN ALL FAMILIES PROVIDES EVIDENCE FOR MULTIPLE SUSCEPTIBILITY GENES", MOL. PSYCHIATRY, 2002, PP. 542-559, VOL. 7, NO. 6			
	✓	SUI ET AL.; "A DNA VECTOR-BASED RNAi TECHNOLOGY TO SUPPRESS GENE EXPRESSION IN MAMMALIAN CELLS", PROC. NATL. ACAD. SCI., APRIL 16, 2002, PP. 5515-5520, VOL. 99, NO. 8			
	✓	TAN ET AL.; "PHOSPHORYLATION OF A NOVEL MYOSIN BINDING SUBUNIT OF PROTEIN PHOSPHATASE 1 REVEALS A CONSERVED MECHANISM IN THE REGULATION OF ACTIN CYTOSKELETON", THE JOURNAL OF BIOLOGICAL CHEMISTRY, 2001, PP. 21209-21216, VOL. 276, NO. 24			
	✓	TAN ET AL.; "INTERMOLECULAR AND INTRAMOLECULAR INTERACTIONS REGULATE CATALYTIC ACTIVITY OF MYOTONIC DYSTROPHY KINASE-RELATED Cdc42-BINDING KINASE α ", MOLECULAR AND CELLULAR BIOLOGY, APRIL 2001, PP. 2767-2778, VOL. 21, NO. 8			
	✓	WANG ET AL.; "LIGAND-INDUCIBLE AND LIVER-SPECIFIC TARGET GENE EXPRESSION IN TRANSGENIC MICE", NATURE BIOTECHNOLOGY, MARCH 1997, PP. 239-243, VOL. 15			
	✓	WARY ET AL.; "A HOMOZYGOUS DELETION WITHIN THE CARBONIC ANHYDRASE-LIKE DOMAIN OF THE Ptprg GENE IN MURINE L-CELLS", CANCER RESEARCH, APRIL 1, 1993, PP. 478-482, VOL. 53			
	✓	WILMUT ET AL.; "VIABLE OFFSPRING DERIVED FROM FETAL AND ADULT MAMMALIAN CELLS", LETTERS TO NATURE, FEBRUARY 1997, PP. 810-813, VOL. 385			
	✓	YE ET AL.; "REGULATED DELIVERY OF THERAPEUTIC PROTEINS AFTER IN VIVO SOMATIC CELL GENE TRANSFER," SCIENCE, JANUARY 1999, PP. 88-91, VOL. 283			
	✓	ZHAO ET AL.; "REVERSIBLE MODIFICATION OF TISSUE-TYPE PLASMINOGEN ACTIVATOR BY METHYLPHOSPHONATE ESTERS," BIOORGANIC & MEDICINAL CHEMISTRY, 1996, PP. 523-529, VOL. 4			
	✓	ZY; "PROTEIN TYROSINE PHOSPHATASES: STRUCTURE AND FUNCTION, SUBSTRATE SPECIFICITY, AND INHIBITOR DEVELOPMENT," ANNU REV PHARMACOL TOXICOL, 2002, PP. 209-34, VOL. 42			

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.